Managing Civil Engineer

General Information	
Classification Code:	MGRPRG
Effective Date:	06/08/2022
Pay Grade:	D62-D63
FLSA Status:	Exempt

Position Summary

Manages operational aspects of assigned department engineering functions under the guidance of the DPW Director and/or City Engineer with minimal direction. This position has oversight and is responsible for managing and delivering one or more engineering programs; performs a full range of professional Civil Engineering duties; plans, directs, and organizes the function of the engineering program; establishes the organizational unit and project goals; and supervises assigned professional engineers, professionals, technical, non-technical, and paraprofessional staff within the programs. Sets objectives, is accountable for overall results and also supports unified objectives for multiple departments by coordinating with other Managing Civil Engineers, leadership and employees for consistency in application of engineering standards, regulations, and techniques used in construction of infrastructure.

Classification Characteristics

The Managing Civil Engineer falls under the Manager/Program Manager classification and is responsible for interpreting and carrying out the programs or objectives set by Senior Program Managers or Executive Managers and decide how best to use the assigned resources. This position is distinguished from the City Engineer in that the latter has overall responsibility for all functions of the Engineering Division. Manager/Program Managers have responsibility for one or two program areas whereas the higher level classification has responsibility for multiple program or major project areas.

Essential Duties

The duties listed below are a typical sample; position assignments may vary.

1	Provides management and delivery of the Land-Use Development program focused largely on privately initiated construction projects. Oversees permitting and development services; assists developers, contractors, engineers, and the public with City standards, criteria, codes and ordinances; coordinates with other areas in the development of design and construction standards and the implementation of master plans.
2	Assists City Engineer and other Managing Civil Engineers in addressing engineering challenges, standards and specifications amendments and other items to achieve consistency in application of engineering requirements in the City of Springfield. Includes collaborative master planning efforts, engineering project management, planning, design, design review, surveying, permit issuance, construction and mapping/records.
3	Acts as liaison with other city divisions and departments, outside agencies, business and community representatives and other organizations including ensuring City's interests are addressed, notifying public/businesses of construction projects, handling controversial issues, assisting in resolving conflicts, answering questions and complaints, providing technical assistance and developing and establishing standards.
4	Reviews, approves, and affixes professional engineering seal to construction drawings, studies, reports, and plans. Performs a variety of technical tasks and highly complex staff assistance related to area of responsibility.

Essential Duties	
5	Recommends revision and adoption of City Ordinances, policies, specifications, manuals, etc. related to focus area. Provides project monitoring and inspection support to ensure compliance with applicable codes, regulations, laws and standards. Applies technical knowledge to assess and contain risk to the public and reduce tort liability.
6	Provides direct supervision to professional engineering, technical engineering, and administrative staff; prepares performance evaluations; and makes hiring, termination, and disciplinary recommendations. Makes pay rate change recommendations and provides training and development for staff. Plans, prioritizes, develops work plans, assigns, supervises, and reviews the work of staff involved in engineering.
7	Manages and coordinates the resources and engineering related activities of the specific program area. Participates in budget preparation and administration; prepares cost estimates for budget recommendations; submits justifications for requests; and monitors and controls expenditures.
8	Develops and implements quality control and assurance practices to ensure that project or program objectives are met, scope and schedules are achieved, and projects are delivered, meeting expectations of the City, Department Managers, public, and stakeholders while maximizing quality and cost effectiveness. Assesses effectiveness of activities and makes required improvements.
9	Prepares and delivers presentations to City Council and other public officials related to the area of responsibility.
10	Determines scope, prioritizes and establishes program deliverables and timelines, and provides oversight for complex engineering projects; conducts specialized studies and analyses.
11	Performs other duties of a similar nature or level.

Functional Specific Responsibilities

N/A

Qualifications

Minimum Qualifications:

- Bachelor's degree in Civil Engineering or a closely related field; AND
- Eight (8) years of increasingly responsible experience in civil engineering including a minimum of three (3) years of supervisory responsibilities;
- An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

Licensing/Certifications:

- Registration as a Professional Civil Engineer in the State of Oregon, or the ability to obtain Oregon registration, within twelve (12) months of appointment.
- Valid Driver's License in the State of Oregon

Technology Skills:

- Analytical or scientific software — HEC-RAS; Mike Urban, HydroCAD or XPSWMM
- Computer aided design CAD software — Autodesk AutoCAD Civil 3D
- Document management software — Laserfiche, Accela
- Enterprise resource planning ERP software — PeopleSoft
- Internet browser software — Microsoft Edge, Google Chrome
- Map creation software — ESRI ArcGIS software; ESRI ArcView; Geographic information system GIS software
- Office suite software — Microsoft Office, Office 365 (e.g., MS Word, MS Excel, MS Outlook, MS Powerpoint)
- Project management software —Microsoft Project

Qualifications

Knowledge Required:

- Design — Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Administration and Management — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
- English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. Knowledge of common engineering terms and meanings, and the ability to convey to professionals and non-professionals the meanings of concepts.
- Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Computers and Electronics — Knowledge of computer software applications.
- Physics — Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid and material dynamics.
- Construction Processes — Knowledge of construction processes, quality control, costs, and other techniques for construction.
- Clerical — Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, designing forms, and other office procedures and terminology.
- Public Safety and Security — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- Building and Construction — Knowledge of materials, methods, and the tools involved in the construction or repair infrastructure: such as sewers, highways and roads.

Skills:

- Reading Comprehension — Understanding written sentences and paragraphs in work related documents.
- Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- Speaking — Talking to others to convey information effectively.
- Writing — Communicating effectively in writing as appropriate for the needs of the audience.
- Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.
- Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Mathematics — Using mathematics to solve problems.
- Time Management — Managing one's own time and the time of others.
- Coordination — Adjusting actions in relation to others' actions.
- Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
- Social Perceptiveness — Being aware of others' reactions and understanding why they react as they do.
- Instructing — Teaching others how to do something.
- Learning Strategies — Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.
- Management of Personnel Resources — Motivating, developing, and directing people as they work, identifying

Qualifications

the best people for the job.

- Service Orientation — Actively looking for ways to help people.
- Negotiation — Bringing others together and trying to reconcile differences.
- Persuasion — Persuading others to change their minds or behavior.
- Systems Analysis — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- Quality Control Analysis — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
- Systems Evaluation — Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

Abilities:

- Written Comprehension — The ability to read and understand information and ideas presented in writing.
- Oral Comprehension — The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Oral Expression — The ability to communicate information and ideas in speaking so others will understand.
- Speech Clarity — The ability to speak clearly so others can understand you.
- Deductive Reasoning — The ability to apply general rules to specific problems to produce answers that make sense.
- Inductive Reasoning — The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
- Mathematical Reasoning — The ability to choose the right mathematical methods or formulas to solve a problem.
- Problem Sensitivity — The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Written Expression — The ability to communicate information and ideas in writing so others will understand.
- Fluency of Ideas — The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
- Information Ordering — The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
- Near Vision — The ability to see details at close range (within a few feet of the observer).
- Speech Recognition — The ability to identify and understand the speech of another person.
- Visualization — The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.
- Originality — The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
- Number Facility — The ability to add, subtract, multiply, or divide quickly and correctly.
- Category Flexibility — The ability to generate or use different sets of rules for combining or grouping things in different ways.
- Far Vision — The ability to see details at a distance.
- Flexibility of Closure — The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material.
- Selective Attention — The ability to concentrate on a task over a period of time without being distracted.
- Visual Color Discrimination — The ability to match or detect differences between colors, including shades of color and brightness.

Physical Requirements

Key	None 0% (0 hrs.)	Seldom 1-10% (Up to 1 hrs.)	Occasionally 11-35% (Up to 3 hrs.)	Frequently 36-75% (3-6 hrs.)	Continuous 76-100% (6+ hrs./day)

Physical Requirements

	0%	1-10%	11-35%	36-75%	76-100%		0%	1-10%	11-35%	36-75%	76-100%
BODY POSITIONS						**PUSH/PULL**					
Standing			X			0-10 lbs.			X		
Sitting				X		11-20 lbs.		X			
Walking – Even Surface			X			21-50 lbs.	X				
Walking – Uneven Surface			X			51-75 lbs.	X				
Kneeling		X				76-100 lbs.	X				
MOVEMENTS						**ENVIRONMENTAL HAZARDS**					
Bending/Stooping		X				Indoors					X
Twisting	X					Outdoors			X		
Crawling	X					Dust		X			
Squatting/Crouching		X				Fumes/Odors/Gasses	X				
Balancing	X					Chemical Agents	X				
Reach – Overhead	X					Biological Agents	X				
Reach – Forward		X				Noise – Low	X				
Reach – Backward	X					Noise – Moderate		X			
Climbing – stairs	X					Noise – High		X			
Climbing - ladder	X					Low Light	X				
USE OF HANDS						Heat		X			
Grasping – whole hand		X				Cold		X			
Grasping – pinch grip			X			Restricted workspace	X				
Fine manipulation/feeling			X			Vibration – whole body	X				
Keyboarding				X		Vibration - extremity	X				
LIFT/CARRY						**JOB SPECIFIC**					
0-10 lbs.			X			Driving – vehicle/equipment		X			
11-20 lbs.		X				Operate foot controls					
21-50 lbs.	X					Seeing					X
51-75 lbs.	X					Talking			X		
76-100 lbs.	X					Hearing			X		
						Extended work hours		X			

Classification History

Created: 2012.01
2015.04 – Revisions by HR
2021.03 – Reformat and revisions by HR
2022.06 – Revisions by HR; 2022.07 Update grade

I have reviewed the job description.

Employee: Name_____ Signature _____ Date _____